In the Matter of the Nebraska)	Application	No. NUSF-50
Public Service Commission, on)	Progression	Order No. 2
its own motion to make)		
adjustments to the universal)		
service fund mechanism)		
established in NUSF-26.)		
In the Matter of the)	Application	No. C-
Commission, on its own)	3554/PI-112	
motion, seeking to)		
investigate whether the zones)		
established in Docket No. C-)		
2516 are appropriate in light)		
of NUSF-26 findings and)		
conclusions	١	Entered: Api	ril 17. 2007

Consistent with the terms of the prehearing conference, the Staff of the Nebraska Public Service Commission (Staff) hereby submit the following prefiled testimony in the above-captioned proceeding.

- 1. Direct testimony of Tyler Frost on behalf of the Communications Department and Nebraska Infrastructure and Public Safety Department of the Nebraska Public Service Commission
- 2. Direct testimony of Dr. David Rosenbaum on behalf of the Communications Department and Nebraska Infrastructure and Public Safety Department of the Nebraska Public Service Commission

Dated this 17th day of April, 2007.

Respectfully submitted

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this 17th day of April, 2007, an electronic copy with paper copies following of the foregoing was delivered to:

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DIRECT TESTIMONY OF

TYLER FROST

ON BEHALF OF

THE NEBRASKA PUBLIC SERVICE COMMISSION

April 17, 2007

- 1 Q: Please state your name and spell it for the record?
- 2 A: Tyler Frost.

- 4 Q: By whom are you employed?
- 5 A: The Nebraska Public Service Commission.

6

- 7 Q: What are your title and your job responsibilities?
- 8 A: My title is Analyst/Economist II. As such, I model,
- 9 create, and analyze various methodologies, scenarios, and
- 10 environments to assist in the development of policy as it
- 11 relates to various Commission regulated proceedings.

12

- 13 Q: Please describe your education and training.
- 14 A: I currently hold a Bachelor of Science in Mathematics
- 15 and a Master of Arts in Economics, both from the University
- 16 of Nebraska, Lincoln.

17

- 18 Q: As part of your responsibilities did you assist in the
- 19 development of the staff proposal in the present docket?
- 20 A: Yes.

- 22 Q: Are you familiar with the staff proposal, as well as
- 23 Commission orders in Applications C-2516 and NUSF-26?
- 24 A: Yes.

- 2 Q: What is the purpose of your testimony?
- 3 A: The purpose of my testimony is to provide a general
- 4 explanation of the Staff Proposal, its components; the
- 5 Unifying Method and the Porting Method, and its underlying
- 6 calculations.

7

- 8 Q: Please provide a general description of the staff
- 9 proposal; how it enhances the methodology established in
- 10 Application No. C-2516, and how it impacts Application No.
- 11 NUSF-26?
- 12 A: The Staff Proposal's Unifying Method (UM) increases
- 13 the number of zones established in C-2516, from three to
- 14 six, bifurcating each existing zone into two; in-town and
- 15 out-of-town, and determines UNE loop rates for each. The
- 16 Staff Proposal's Porting Method (PM) then utilizes the UM's
- 17 results to determine monthly per-line NUSF portable support
- 18 amounts.

- 20 Q: Please explain the Unifying Method.
- 21 A: The UM modifies the unbundled network element loop
- 22 (UNE-L) rates, effective as a result of C-2516, and

- 1 develops UNE-L rates for in-town and out-of-town areas,
- 2 consistent with the support areas determined in NUSF-261.

- 4 Q: Please describe the UM's calculations.
- 5 A: The proposed methodology first calculates a measure of
- 6 total UNE-L revenue. This measure is based on effective
- 7 UNE-L rates, zones 2 as determined in C-2516, and total area
- 8 residential access lines. The measure of UNE-L revenue is
- 9 then allocated, by zone, to in-town and out-of-town areas.
- 10 The in-town/out-of-town bifurcation is accomplished through
- 11 the application of factors³ developed utilizing NUSF-26 data
- 12 and results.
- Once in-town and out-of-town total UNE-L revenue
- 14 amounts are determined for each zone; per-line UNE-L rates,
- 15 for each in-town zone area and out-of-town zone area, are

¹ In the Matter of the Nebraska Public Service Commission, on its own motion, seeking to establish a long-term universal service funding mechanism, Application No. NUSF-26, Findings and Conclusions, (November 3, 2004); In the Matter of the Nebraska Public Service Commission, on its own motion, seeking to establish a long-term universal service funding mechanism, Application No. NUSF-26, Second Erratum to Progression Order No. 5, (July 22, 2004) at Appendix A.

² In the Matter of the Commission, on its own motion, to investigate cost studies to establish Qwest Corporation's rates for interconnection, unbundled network elements, transport and termination, and resale, Application No. C-2516/PI-49, Findings and Conclusions (April 23, 2002) at Appendix B.

³ The bifurcation factors are defined as the percentage of expected loop revenue, determined using a household weighted expected loop cost amount and households, in a specific in-town or out-of-town area, by zone.

- 1 determined using the respective access line counts⁴ and
- 2 employing simple division.
- 3 The resulting UNE-L zone rates illustrate, and
- 4 coincide with, the findings in NUSF-26; in-town areas are
- 5 less costly to serve and do not need universal service
- 6 support.

- 8 Q: Are there any reasonable alternatives to the 6-zone
- 9 configuration?
- 10 A: Yes. As a reasonable alternative to the 6-zone
- 11 configuration, a 4-zone configuration could also be
- 12 considered whereby all in-town areas in current zones 1, 2
- 13 and 3 would constitute one zone. Out-of-town Zones 1, 2
- 14 and 3 would constitute three separate zones.

- 16 Q: Please explain the PM.
- 17 A: The PM determines the amount of monthly per-line NUSF
- 18 support ported to a competitive Nebraska Eligible
- 19 Telecommunications Carrier (NETC) upon capture of an access
- 20 line previously served by an incumbent NETC, and develops
- 21 NUSF portable support amounts consistent with the support
- 22 areas determined in NUSF-26.

 $^{^4}$ Total residential access lines are allocated to in-town and out oftown areas using NUSF-26 household data.

- The PM utilizes the in-town and out-of-town results of
- 2 the UM to determine monthly per-line NUSF portable support
- 3 amounts.

- 5 Q: Please describe the PM's calculations.
- 6 A: The competitive NETC's cost of providing the unbundled
- 7 loop is equivalent to the UNE-L rate for the respective
- 8 zone. Thus, the maximum per-line NUSF portable support, if
- 9 applicable⁵, is equal to the UNE-L rate minus a loop revenue
- 10 benchmark amount. 6 At no point shall the per-line NUSF
- 11 portable support exceed the calculated maximum amount.
- One additional step is necessary to ensure per-line
- 13 NUSF support amounts ported to a competitive NETC, for a
- 14 particular line, do not exceed NUSF support amounts
- 15 previously received by the incumbent NETC for said line.
- 16 Consequently, a per-line NUSF support amount is calculated
- 17 for each in-town and out-of-town zone, based on the
- 18 incumbent NETC's current NUSF support. At no point shall
- 19 the ported NUSF support amount exceed this NUSF support
- 20 amount.

 $^{^{5}}$ In the event the loop revenue benchmark amount exceeds the UNE-L rate for the respective area, the maximum per-line NUSF portable support amount is zero.

 $^{^6}$ The ILEC's NUSF-26 loop revenue benchmark, with the removal of the Access Lines per Household adjustment, to ensure unit commonality, is utilized for the calculation.

- 1 The actual monthly per-line NUSF portable support
- 2 amount is then equal to the minimum of either the portable
- 3 support, based on a competitive NETC's cost to provide the
- 4 unbundled loop, or the per-line NUSF support provided via
- 5 the NUSF-26 mechanisms.

- 7 Q: Does this conclude your testimony?
- 8 A: Yes.

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DIRECT TESTIMONY OF

DR. DAVID ROSENBAUM

ON BEHALF OF

THE NEBRASKA PUBLIC SERVICE COMMISSION

April 17, 2007

- 1 Q: Please state your name, title and business address
- 2 A: David Rosenbaum, Economic Consultant to the Nebraska Public
- 3 Service Commission, Department of Economics, University of
- 4 Nebraska, Lincoln NE 68588-0489.

- 6 Q: What is the purpose of your testimony?
- 7 A: To comment on the forward looking nature of UNE loop rates
- 8 and NUSF support as proposed in this docket, and to comment on
- 9 why six zones eliminates competitive distortions created by the
- 10 current three zones.

11

- 12 Q: How were UNE loop rates established in Docket C-2516?
- 13 A: Loop costs were estimated using three forward-looking,
- 14 TELRIC compliant, cost models; BCPM, HCPM and HAI. Results from
- 15 the models were averaged to get a forward-looking loop cost by
- 16 wire center. Wire centers were aggregated into three zones,
- 17 based on their loop costs. Finally, average loop costs were
- 18 determined for each zone based on the aggregation.

- 20 Q: How were the UNE zones established in C-2516?
- 21 A: In C-2516, the Commission found that areas with similar
- 22 cost characteristics, exhibiting similar cost structures, should

- 1 be grouped into zones with an average price developed for each. 1
- 2 Specifically, to define zones, the Commission adopted a
- 3 statistical cluster analysis methodology to aggregate wire
- 4 centers into zones based on loop cost; and found the method
- 5 "...fosters competition and is appropriate, cost-based,
- 6 economically sound, competitively accurate and based on TELERIC
- 7 pricing principles." Average loop costs were determined for
- 8 each zone based on the aggregation.
- 9 The Staff Proposal put forth in this current proceeding
- 10 does nothing to undue the methodology established in C-2516, but
- 11 rather builds on the principles previously found and enhances
- 12 the methodology previously employed.

- 14 Q: How many zones were established in C-2516?
- 15 A: Three. The Commission, in Application No. C-2516, created
- 16 three zones³ pursuant to Federal Communications Commission (FCC)
- 17 regulations giving state commissions the authority to create
- 18 rate zones in determining the unbundled element network loop

¹ In the Matter of the Commission, on its own motion, to investigate cost studies to establish Qwest Corporation's rates for interconnection, unbundled network elements, transport and termination, and resale, Application No. C-2516/PI-49, Findings and Conclusions (April 23, 2002) ¶79.

² Id. ¶81.

³ In the Matter of the Commission, on its own motion, to investigate cost studies to establish Qwest Corporation's rates for interconnection, unbundled network elements, transport and termination, and resale, Application No. C-2516/PI-49, Findings and Conclusions, (April 23, 2002) and In the Matter of the Commission, on its own motion, to investigate cost studies to establish Qwest Corporation's rates for interconnection, unbundled network elements, transport and termination, and resale, Application No. C-2516/PI-49, Compliance Filing Approved in Part and Denied in Part & Other Rates Declared Effective, (June 5, 2002).

Application Nos. C-3554/NUSF-50/PI-112 Progression Order No. 2

- 1 (UNE-L) rates. 4 The regulation, however, does not limit the
- 2 number of zones to three, but merely requires a minimum of three
- 3 cost-related rate zones.⁵

4

- 5 Q: Are the UNE loop rates established in C-2516 forward
- 6 looking?
- 7 A: Yes they are. They were developed based specifically on
- 8 the results of three forward-looking cost models. 6 The UNE loop
- 9 rates are cost-based, nondiscriminatory, TELERIC-based, forward-
- 10 looking and representative of efficient technologies.7

- 12 Q: Please describe the Staff Proposal in the current matter as
- 13 it relates to zones.
- 14 A: The Staff Proposal increases the number of zones
- 15 established in C-2516, from three to six, by bifurcating each
- 16 existing zone into two; in-town and out-of-town. Each newly
- 17 defined rate area exhibits similarities in cost characteristics
- 18 and structures, reflects geographical cost differences from its
- 19 fraternal twin⁸, and continues to advance the goals and
- 20 objectives of the Commission. UNE loop rates are determined for
- 21 each zone.

⁴ 47 C.F.R. § 54-51.507.

⁵ 47 C.F.R. § 54-51.507(f)(1) and (f)(2)(Emphasis added).

⁶ C-2516, Findings and Conclusion supra, ¶¶73-74.

⁷ Td.

- 2 Q: Are the proposed UNE loop rates in each area forward
- 3 looking as well?
- 4 A: Yes they are. The proposed rates are simply a
- 5 disaggregation of the current rates. The method of
- 6 disaggregating each zone into in-town and out-of-town areas
- 7 employs the forward-looking results used in the NUSF docket.
- 8 Thus, current forward-looking UNE loop rates9, are disaggregated,
- 9 based on forward-looking regression results 10; resulting in
- 10 proposed forward-looking UNE loop rates, based on forward-
- 11 looking, TELRIC compliant, cost models. 11

- 13 Q: Are NUSF portable support payments under the Staff Proposal
- 14 forward-looking?
- 15 A: Yes they are. Portable support payments are predicted upon
- 16 underlying forward-looking costs as developed in BCPM, a
- 17 forward-looking cost model. It is the smaller of either the
- 18 difference between the forward-looking UNE loop rate minus the
- 19 benchmark, or the support amount determined by the NUSF

⁹ Id. ¶¶ 73-74.

¹⁰ In the Matter of the Nebraska Public Service Commission, on its own motion, seeking to establish a long-term universal service funding mechanism, Application No. NUSF-26 (November 3, 2006), $\P\P$ 46, 53; NUSF-26 at Appendix A at 1-3.

¹¹ Id.; C-2516, Findings and Conclusions, supra.

- 1 methodology from NUSF-50 that was already shown to be forward-
- 2 looking. 12

- 4 Q: Is the current system with only three UNE zones and NUSF
- 5 payments determined for in-town and out-of-town support areas
- 6 competitively neutral?
- 7 A: No. Some distortions are created in the existing systems
- 8 of NUSF payments and UNE loop prices that can favor a CLEC.
- 9 Other distortions favor an ILEC. For example, currently, in
- 10 zone three, a CLEC may pay approximately \$62 for an in-town
- 11 residential loop. The ILEC would then port the CLEC almost \$70
- 12 in NUSF payments. This means the ILEC loses \$8 for every line
- 13 it ports, while the CLEC makes \$8 in revenue before it even
- 14 sells the line to a residential customer. In such a case, the
- 15 ILEC is at a competitive disadvantage and the CLEC at a
- 16 competitive advantage.
- In contrast, for an in-town business line, a CLEC would pay
- 18 \$28 in zone two and \$62 in zone three. In either case, it would
- 19 receive no NUSF porting. This puts the CLEC at a competitive
- 20 disadvantage, especially in zone three.

21

22 O: Would the staff's proposal eliminate these problems?

 $^{^{12}}$ NUSF-26 supra ¶¶ 46, 53 and Appendix A at 1-2.

- 1 A: Yes it would. Matching in-town and out-of-town UNE prices
- 2 with NUSF portings in all zones would eliminate these
- 3 distortions. It would make the playing field competitively
- 4 neutral. The Staff Proposal seeks to integrate the Commission's
- 5 findings in Docket C-2516 and NUSF-26 by developing UNE loop
- 6 rates and portable NUSF support amounts in an appropriate and
- 7 economically sound manner that fosters competition.
- 8 Q: Would you please summarize your conclusions regarding the
- 9 staff proposal?
- 10 A: Yes. In conclusion, I wish to make two (2) primary points.
- 11 First, the staff proposal is a more competitively neutral method
- 12 for determining UNE pricing, favoring neither the ILEC nor the
- 13 CLEC and eliminating the problems existing in the current
- 14 system. Secondly, the staff proposed method is TELRIC compliant
- 15 and forward-looking.
- 16 Q: Does this conclude your testimony?
- 17 A: Yes it does.